

Medication Assisted Recovery

Julie Seitz LADC, LSW
Clinical Director
Center for Alcohol and Drug Treatment

Compassionate Presence

- During our time together, try not to pull out your phone/tablet
- When the urge to do something bubbles up - acknowledge
- Be present



Learning Objectives

- Understand the biological basis for addiction and substance use disorders.
- Identify goals for treatment.
- Know the medications currently FDA approved for the treatment of Opioid Use Disorders.
- Understand the key indications and contraindications for medications used to treat Opioid Use Disorder.
- Understand there is not a “one size fits all” approach to substance use disorder treatment.

**YOU KNOW MY NAME, NOT MY
STORY. YOU'VE HEARD WHAT I'VE
DONE, NOT WHAT I'VE BEEN
THROUGH.**

Addiction

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry.

ASAM

DSM 5 Criteria Summarized

The person must have at least two of the following for a given substance within the same 12-month period:

Drinking or using a drug in an amount that is greater than the person originally sets out to consume (or using over a longer period of time on a given occasion).

Worrying about cutting down or stopping; or unsuccessful efforts to control use.

Spending a large amount of time using a substance, recovering from it, or doing whatever is needed to obtain it.

Common use of a substance resulting in (1) failure to take care of things at home, work, school (or to fulfill other obligations); and/or (2) giving up once-enjoyed recreational activities or hobbies.

Craving, a strong desire to use alcohol or another substance.

DSM 5 Continued

Continuing the use of a substance despite problems caused or worsened by it — (1) in areas of mental (e.g., blackouts, anxiety) or physical health; or (2) in relationships (e.g., using a substance despite people's objections or it causing fights or arguments).

Recurrent alcohol/substance use in a dangerous situation (such as driving or operating machinery).

Building up "tolerance" as defined by either needing to use noticeably larger amounts over time to get the desired effect or noticing less of an effect over time after repeated use of the same amount.

Experiencing withdrawal symptoms (e.g., anxiety, irritability, fatigue, nausea/vomiting, hand tremor or seizure in the case of alcohol) after stopping use.

- Why is addiction a brain disease?
- By using drugs, drugs “teach” the brain that drugs are responsible for pleasure. With addiction, the brain has changed to a point that normal life cannot give the person pleasure.



- How does substance use teach the brain?
- Drug use floods the brain with neurotransmitters. Drug use interferes with normal brain functioning. Drug use causes the brain to change and remember intense feelings of pleasure.



Addiction ABC's:

- A. Inability to consistently **A**bstain
- B. Impairment in **B**ehavioral control
- C. **C**raving
- D. **D**iminished recognition of significant problems
- E. A dysfunctional **E**mootional response

Addiction

- Biopsychosocial Model (BPS)
 - Complex interactions between biological, psychological, and socio-cultural factors
 - Origins of addictive behavior are complex, variable, and multifactoral
 - Ongoing interaction between factors
 - Interactions and weighting vary from person to person

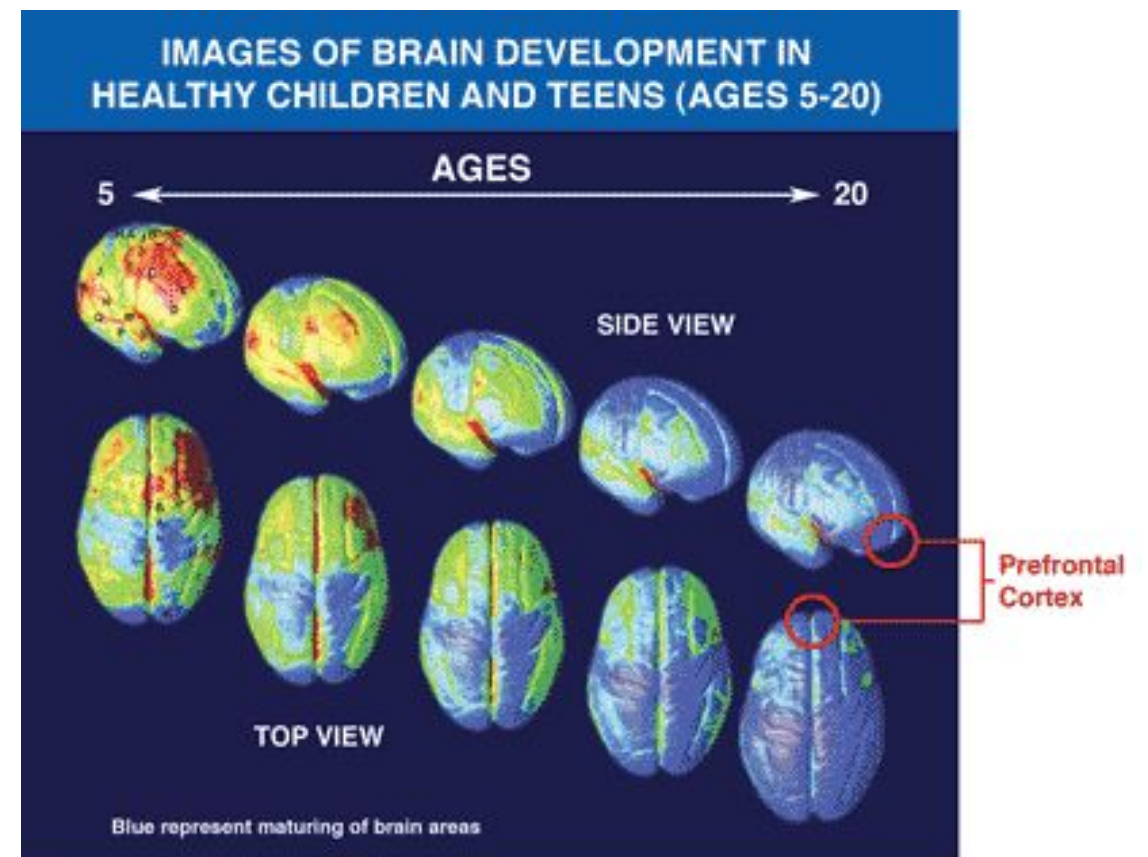
A Caution

When we look at addiction as a physical disease, we don't acknowledge the lived experience of the individual. The behaviors are just symptoms, they are not the core.

Dr. Gabor Mate

Developing Brain

- The brain continues to develop into adulthood and undergoes significant changes during adolescence.
- Prefrontal Cortex -Problem Solving, Emotion, Complex Thought



Source: Copyright PNAS ;101(21):8174-9. 2004

Prefrontal Cortex

- Enables us to assess situations
- Make sound decisions
- Keep our motions and desires under control

Introducing chemicals while the brain is still developing may have profound and long-lasting consequences

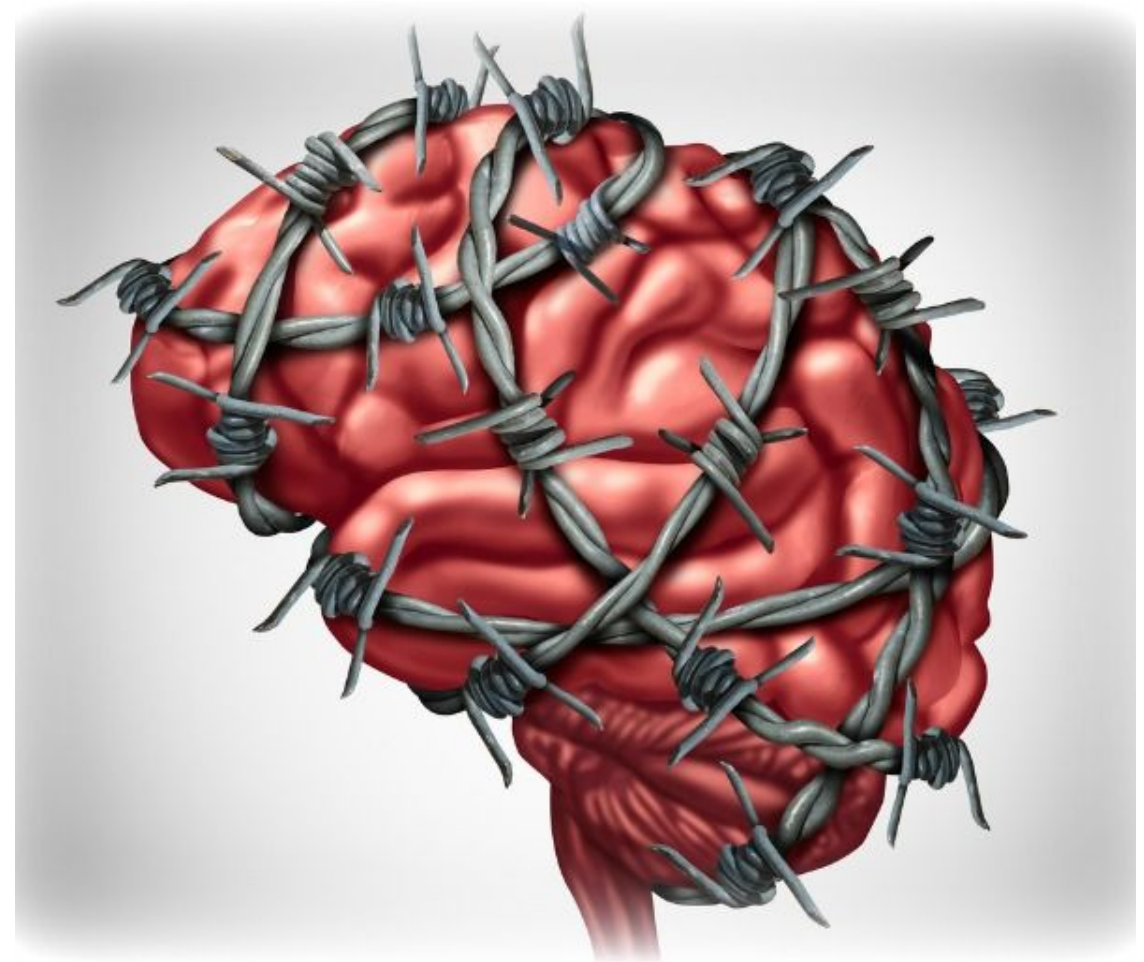
Voluntary or Involuntary?



- The initial decision to use is mostly voluntary
- When substance abuse takes over, the ability to exert self control can become seriously impaired.

Long Term Use Rewires Brain Circuits

- Trigger adaptation in habit or non-conscious memory systems
- Conditioning: environmental cues become associated with the use experience and can trigger uncontrollable cravings
- This learned "reflex" is extremely robust and can emerge even after many years of abstinence



The Brain Learns This *Very Well*

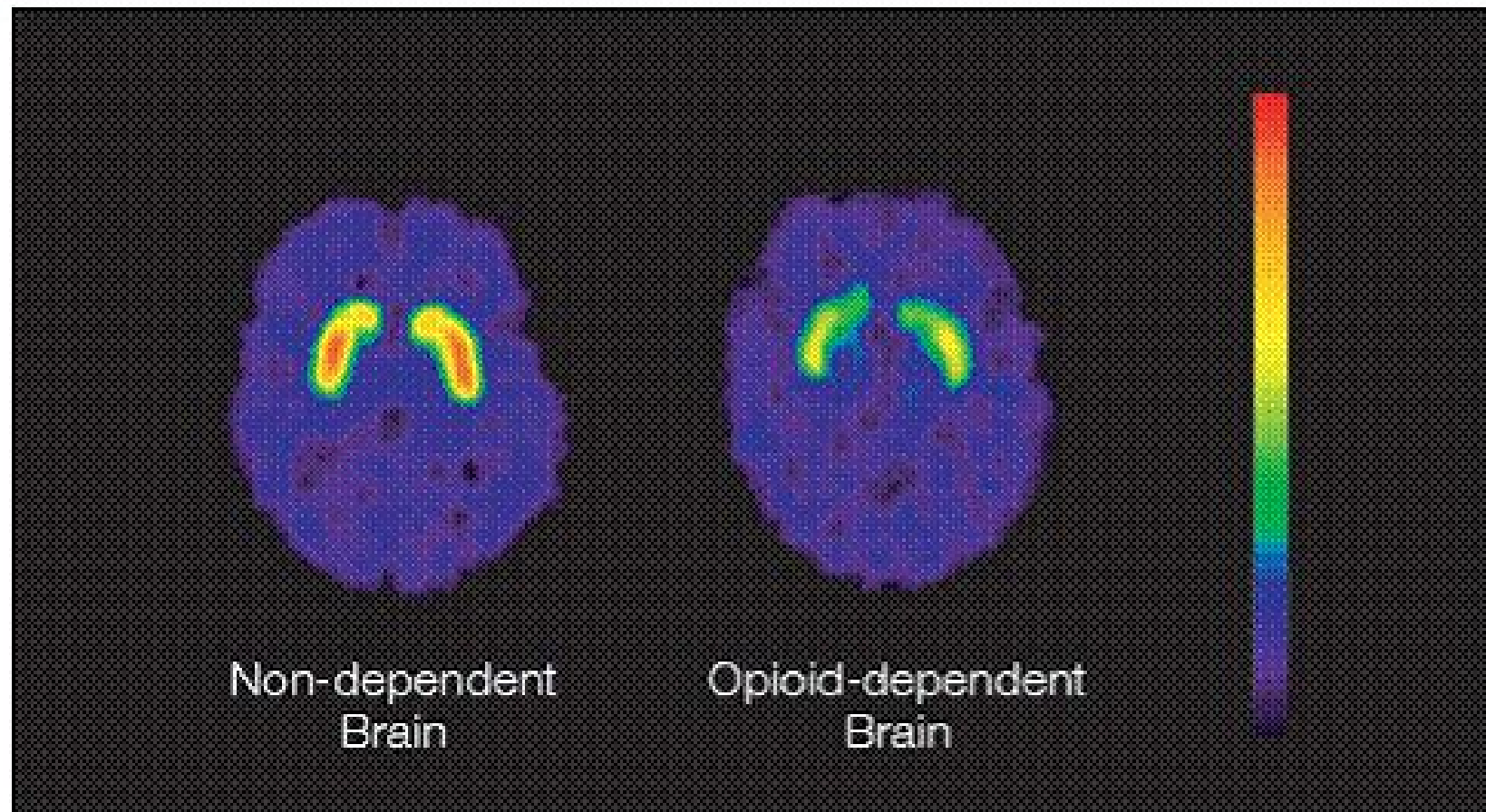
- Depending on the drug of abuse, 2-10 times the amount of dopamine can be released vs. natural rewards
- Onset and duration of dopamine
 - Can happen immediately or very quickly and last much longer than natural rewards

Lasting Effects on the Brain

- Brain adjusts to overwhelming surges in dopamine by producing less dopamine and fewer receptors
- As a result, the ability to experience any pleasure is reduced
- Drugs are now needed in larger amounts to feel high
- Eventually, this is baseline or "normal" and no longer produce a high

Opioids and the Brain

Non-Opioid-Dependent and Opioid-Dependent Brain Images



PET scan images show changes in brain function caused by opioid dependence. The lack of red in the opioid-dependent brain shows a reduction in brain function in these regions.

Reprinted by permission of Nature Publishing Group: *Neuropsychopharmacology*. 1997;16:174-182.

Goals of addiction treatment?

- Abstinence from the substance of abuse?
- Abstinence from all substances of abuse?
- Decrease use of the substance as abuse?
- Harm reduction?
- Improving psychosocial variables? (Work, school, relationships)
- Improve physical health?
- Improvement in mental health?

Treatment

- Substance use disorders are treatable
- Can be managed similar to other chronic diseases.
- Treatment involves changing deeply embedded behaviors.
- Treatment is often a combination of medications and behavioral therapies.

Behavioral Therapies

- Engage people in treatment
- Modify attitudes and behaviors
- Increase skills to handle cravings & triggers
- Enhance the effectiveness of medications
- Help people remain in treatment longer

Psychotherapy Approaches to Substance use Disorders

- Motivational Interviewing
- Cognitive-Behavioral Therapy
- Family Structural Therapy
- Contingency Management Strategies
- Mindfulness Therapy

Role of Medications

- Treating withdrawal symptoms
- Treating cravings, so that individual can focus on counseling and other psychotherapies
- Preventing relapse



Examples of Medications Used in SUD Treatment

- Tobacco Addiction
 - Nicotine Replacement, bupropion, Chantix
- Opioid Addiction
 - Methadone, buprenorphine, naltrexone
- Alcohol and drug addiction
 - Disulfiram, naltrexone, acamprosate

Not a “One size fits all” shop

- Treatment should be tailored and centered around the needs and wants of the individual client, not a “cookie-cutter” approach.



“If suffering cured addiction, there wouldn't be any.”

–William R. Miller, PhD

Characteristics of Chronic Disease Model

- Emphasizes comprehensive, sustained treatment to help retain patients, maintain adherence, and focus on success
- Minimizes stigma associated with opioid dependence
- Promotes continuity of care
- Underscores the importance of ongoing monitoring
- Reinforces the need for a multifaceted, multidisciplinary treatment approach

Methadone

- Methadone is a synthetic opioid – analgesic
- Full opioid agonist
- First used in 1964 to treat heroin/morphine addiction
- Considered the gold standard for treating opiate addiction
- The most regulated substance use disorder treatment
- Risk of over medication and medication interaction
- Safe for prolonged use - nontoxic

Buprenorphine

Suboxone/Subutex

- Buprenorphine is a synthetic opioid – analgesic
- Partial opioid agonist
- Approved for SUD 2000 to treat opioid addiction
- Considered the gold standard for treating opiate addiction
- Option for office based setting or as part of a Rule 31 program
- Limited application – low to moderate tolerance
- Higher cost
- Safe for prolonged use – nontoxic
- Safer medication – Ceiling effect

Naltrexone

- Naltrexone blocks opioids from acting on the brain. This feature makes naltrexone a good choice for preventing relapse
- Naltrexone may not stop drug cravings.
- Works as a “blocker.” It attaches to certain opioid receptors in your brain and blocks the pleasurable feelings associated with taking opioids.

How Medication Assisted Treatment Works

- What are the goals of Medication Assisted Treatment?
- What characteristics are important for an effective medication?
- Won't patients just take more and more or use it to get high?

Goals of MAT

- Prevention or reduction of withdrawal symptoms
- Prevention or reduction of drug craving
- Prevention of relapse to use of addictive drug
 - Blockade effect
- Restoration to or toward normalcy of any physiological function disrupted by drug abuse

Impact of Maintenance Treatment

- Reduction death rates (Grondblah, '90)
- Reduction IVDU (Ball & Ross, '91)
- Reduction crime days (Ball & Ross)
- Reduction rate of HIV seroconversion (Bourne, '88; Novick '90,; Metzger '93)
- Reduction relapse to IVDU (Ball & Ross)
- Improved employment, health, & social function

Optimal Response from MAT

- Prevention of onset of withdrawal syndrome for 24 hours or more
- Reduction or elimination of drug hunger or craving
- “Blockade” of euphoric effects of illicit self-administered opioids

Adequate Dosing

~~LOW DOSE~~

HIGH DOSE



Adequate Dosing

- An adequate dose is individualized and based on clinical response

Maximum Dosing

Arbitrary dose ceilings have no foundation in science or clinical medicine. Programs with “dose caps” can expect problems with accreditation. Dose caps are not supported by CSAT, ASAM or any credible entity.

Medically Supervised Withdrawal

Medically Supervised Withdrawal is for the Highly Motivated Patient Who Has:

- No alcohol/drug use/abuse (>6mo)
- Stable living/social/employment situation
- No illegal activities, warrants, or cases pending
- Relative psychiatric/medical stability
- Friends and associates from outside drug culture
- Non-drug related hobbies, interests, and pursuits
- Support system and continuing care in place
- Taper Readiness Inventory

Medically Supervised Withdrawal Techniques

- Graded reduction or taper (usually outpatient)
- Accelerated withdrawal, clonidine assisted with early antagonist induction (in or outpatient)
- Rapid or Ultra-rapid antagonist induced withdrawal under anesthesia or sedation (preferable inpatient – not widely accepted)
- Crossover to Buprenorphine from low to moderate dose methadone then taper from Buprenorphine

Opioid Use During Pregnancy



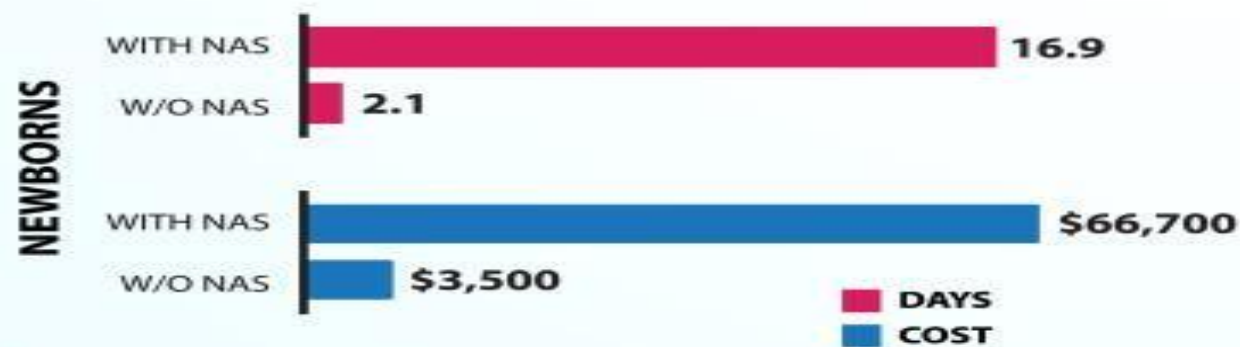
DRAMATIC INCREASES IN MATERNAL OPIOID USE AND NEONATAL ABSTINENCE SYNDROME

THE USE OF OPIOIDS DURING PREGNANCY CAN RESULT IN A DRUG WITHDRAWAL SYNDROME IN NEWBORNS CALLED **NEONATAL ABSTINENCE SYNDROME (NAS)**, WHICH CAUSES **LENGTHY AND COSTLY HOSPITAL STAYS**. ACCORDING TO A NEW STUDY, AN ESTIMATED **21,732 BABIES** WERE BORN WITH THIS SYNDROME IN THE UNITED STATES IN 2012, A **5-FOLD INCREASE** SINCE 2000.

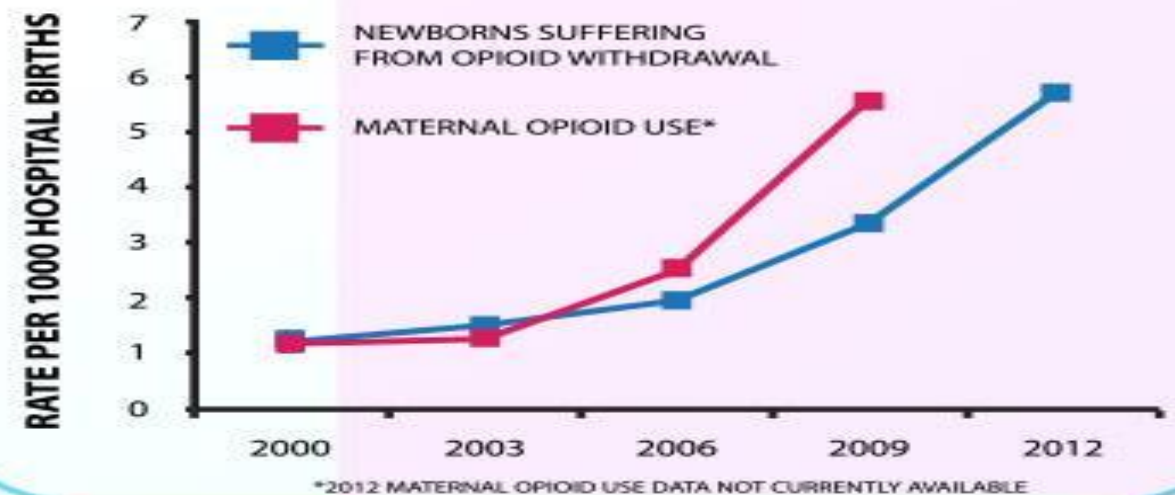


EVERY 25 MINUTES, A BABY IS BORN SUFFERING FROM OPIOID WITHDRAWAL.

AVERAGE LENGTH OR COST OF HOSPITAL STAY



NAS AND MATERNAL OPIOID USE ON THE RISE



MAT and Pregnancy

- Babies born to women with substance use disorders fare better when their mothers are treated with either the medication buprenorphine or methadone than babies whose mothers are not treated at all.

MAT and Pregnancy

- Methadone:
 - Accepted since the 1970's to treat pregnant patients
 - 1998 National Institute on Health recommends it as the standard of care for pregnant women with opioid use disorder
 - Protects fetus from repeated withdrawal episodes
 - With prenatal care, reduces risks of complications during pregnancy
 - Neonatal abstinence syndrome may occur

MAT and Pregnancy

- Buprenorphine
 - Similar maternal and fetal outcomes, yet had lower severity of NAS (Neonatal Abstinence Syndrome) symptoms, thus requiring less medication.
 - No lasting harm on the fetus has been recognized
 - Neonatal abstinence syndrome may occur

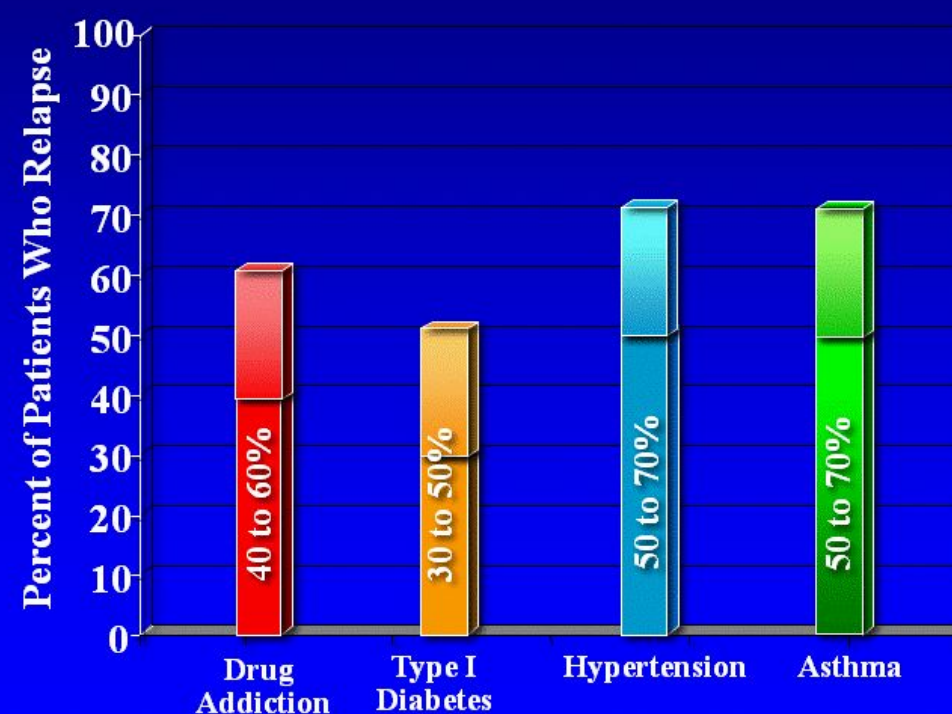
Does Relapse Mean Failure?



Relapse

- This image compares relapse rates for drug-addicted patients with those suffering from diabetes, hypertension, and asthma.
- Relapse is common and similar across these illnesses (as in adherence to medication/treatment plan).

Relapse Rates Are Similar for Drug Addiction & Other Chronic Illnesses



McLellan et al., JAMA, 2000.

Relapse and Opioid/Opiates

- Data from several countries show that treatment policies that insist on abstinence lead to greater number of deaths than those that allow medicine assisted treatment.
- Access to any existing treatment without either MAT or managed withdrawal followed by opioid antagonist therapy is dangerous and unacceptable to most patients.

Understand Relapse-Overdose Risks

- Following periods of abstinence patients are at greatest risk of fatal overdose.
 - Treatment
 - Jail

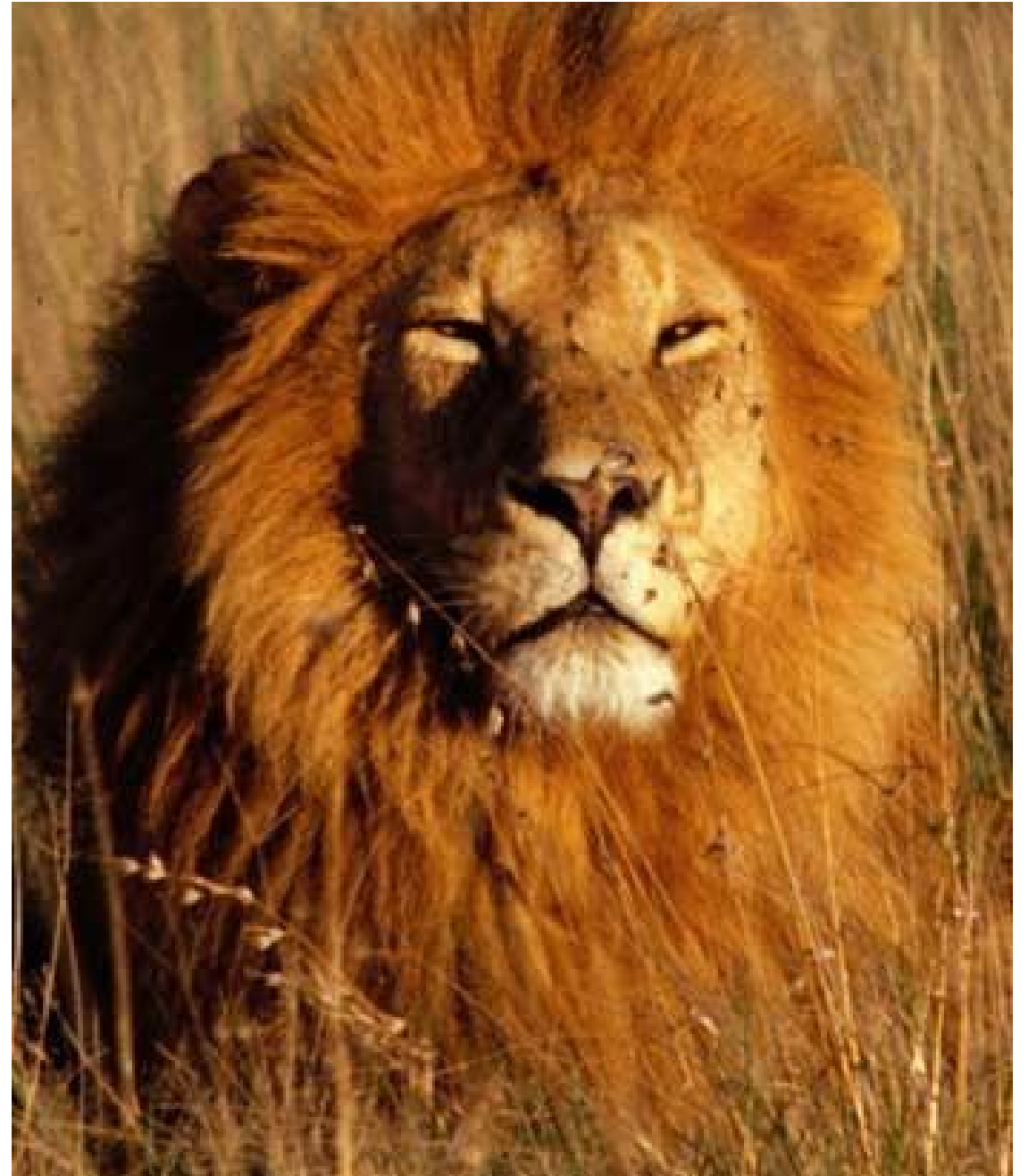
Recovery

- A process or change through which individuals improve their health and wellness, live self-directed lives, and strive to reach their full potential.
 - SAMHSA, Working Definition of Recovery

Client Advocacy

Until lions have their
historians, tales of
hunting will always glorify
the hunter.

African Proverb





Questions/Discussion

